

## General

### Title

Transplants: percentage of patients diagnosed with brain death.

### Source(s)

Quality indicators in critically ill patients. Madrid (Spain): Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC); 2011. 185 p.

## Measure Domain

### Primary Measure Domain

Related Health Care Delivery Measures: User-enrollee Health State

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of patients diagnosed with brain death.

### Rationale

The aim of intensive care medicine is to provide critical patients with the healthcare that they need, ensuring the quality and safety of care. Intensive care medicine is one of the principal components of modern healthcare systems. There is an increasing demand for this resource, which involves high costs.

The quality of care has gradually come to be the central focus of healthcare, and in recent years patient safety has come to represent one of the key aspects of quality. In the case of intensive care medicine, this interest in quality is even more evident, not only because of its social and economic impact, but also because some of the dimensions involved in the quality of care of critical patients take on greater importance: critical patients are more vulnerable, access to critical care is more limited so efforts to distribute resources equitably are more important, scant scientific evidence is available, and the efficiency is limited.

Over 95% of the organs transplanted in Spain come from brain dead donors. These data confirm the importance of brain death (BD) for procuring organs for transplantation. Ample, correct clinical knowledge about the diagnosis of BD will undoubtedly contribute to an increase in the number of donors and therefore to the number of transplants.

In Spain, approximately 14% of patients that die in intensive care units (ICUs) are brain dead; this percentage could reach 30% in referral centers for neurosurgery.

## Evidence for Rationale

Escudero D, Matesanz R, Soratti CA, Flores JJ, nombre de la Red/Consejo Iberoamericano de Donación y Trasplante. [General considerations on brain death and recommendations on the clinical decisions after its diagnosis. Red/Consejo Iberoamericano de Donación y Trasplante]. Med Intensiva. 2009 Dec;33(9):450-4. [PubMed](#)

Escudero D. [Brain death diagnosis]. Med Intensiva. 2009 May;33(4):185-95. [PubMed](#)

Quality indicators in critically ill patients. Madrid (Spain): Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC); 2011. 185 p.

Real Decreto 2070/1999, de 30 de Diciembre, por el que se regulan las actividades de obtención y utilización clínica de órganos humanos y la coordinación territorial en materia de donación y trasplante de órganos y tejidos. BOE 3/2000; 2000 Apr 1. 179-90 p.

Wijdicks EF. The diagnosis of brain death. N Engl J Med. 2001 Apr 19;344(16):1215-21. [PubMed](#)

## Primary Health Components

Transplants; brain death

## Denominator Description

Total number of deaths in the intensive care unit (ICU) (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Total number of patients diagnosed with brain death (BD) (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Hospital Inpatient

Intensive Care Units

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

### Statement of Acceptable Minimum Sample Size

Unspecified

### Target Population Age

Age greater than or equal to 18 years

### Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

National Quality Strategy Priority

## Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

## Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Total number of deaths in the intensive care unit (ICU)

Population: All patients diagnosed with brain death during the period reviewed.

Exclusions

Unspecified

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Total number of patients diagnosed with brain death (BD)

Note:

Brain death: Clinical condition characterized by complete and irreversible cessation of the function of both the brainstem and both cerebral hemispheres.

The diagnosis can only be reached by means of clinical neurologic examination or instrumental diagnostic tests in accordance with the legislation in force. Refer to the original measure documentation for references.

### Exclusions

Unspecified

## Numerator Search Strategy

Institutionalization

## Data Source

Electronic health/medical record

Paper medical record

Region, county, or city public health data

Other

## Type of Health State

Clinically Diagnosed Condition

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Does not apply to this measure (i.e., there is no pre-defined preference for the measure score)

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Prescriptive Standard

Standard: 5% to 30%

Results below 5% represent a poor level of diagnosis.

## Evidence for Prescriptive Standard

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## Identifying Information

### Original Title

Diagnosis of brain death.

### Measure Collection Name

Quality Indicators in Critically Ill Patients

### Measure Set Name

Transplants

### Submitter

Spanish Society of Intensive and Critical Care and Units Coronary - Clinical Specialty Collaboration

### Developer

Spanish Society of Intensive and Critical Care and Units Coronary - Clinical Specialty Collaboration

### Funding Source(s)

Boehringer Laboratories

# Composition of the Group that Developed the Measure

## Work Group on Transplants

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# Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

# Date of Most Current Version in NQMC

2011 Mar

## Measure Maintenance

Unspecified

# Date of Next Anticipated Revision

2016 Jul

## Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in May 2016.

## Measure Availability

Source available in [English](#)  and [Spanish](#)  from the Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC) Web site.

For more information, contact SEMICYUC at Paseo de la Reina Cristina, 36, 4º D, Madrid, Spain; Phone: +34-91-502-12-13; Fax: +34-91-502-12-14; Web site: [www.semicyuc.org](http://www.semicyuc.org); E-mail: [secretaria@semicyuc.org](mailto:secretaria@semicyuc.org).

## NQMC Status

This NQMC summary was completed by ECRI Institute on March 17, 2014. The information was verified by the measure developer on April 25, 2014.

The information was reaffirmed by the measure developer on May 10, 2016.

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## Production

### Source(s)

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